



# Western Region Newsletter

March 2011

## National Weather Service

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## Regional Director's Message

As March arrives, we find our agency, like all of the federal government, still operating under a continuing resolution. During these times of uncertainty, our job is critical for the well-being of our citizens. I know I can count on all of you to continue doing your best to deliver life-saving forecasts and warnings.

Last week, I had the opportunity to meet with the Western Region Diversity Action Committee. I was pleased to note the progress they have made, with the help of office focal points, to promote diversity awareness, as well as EEO principles, across the region. Committee members had one day of training and spent the rest of their time, developing a Strategic Goals and Action Plan for the next few years. It was nice to reconnect with the DAC, and see firsthand, the passion they have for this important program. DAC members change every few years, except for the NWSEO representative, Kevin Durfee. A special thanks to NWSEO and to Kevin and Diane McArthur, Workforce Program Manager for their continued participation. I encourage each of you to look around you and think about the meaning of diversity management in the workplace. Last month, we celebrated our African-American heritage. March is Women's History Month. Celebrate diversity, not just in February and March, but everyday. Take time to get to know your co-workers, to understand and appreciate your differences and to foster a good environment for all.

*Vickie*

## Western Region Diversity Action Committee



L to R: Tom Evans, Dean Hazen, Delyne Kirkham, Charles Shell, Carol Smith, Karrie Schmidt, Brian Sadler, Vickie Nadolski, Todd Hall, Brooke Bingaman, Kevin Durfee, Dan Valle, Roger Lamoni, Diane McArthur (not in photo)

## Western Region Bronze Medal Award Winners



Please join me in congratulating the Western Region winners of the 2010 NOAA Bronze Medal Awards. The awards will be presented at a ceremony on March 15, 2011.

**Jeff Zimmerman** — (Part of a team) For a significant upgrade of the Advanced Hydrologic Prediction Service web pages resulting in more timely and reliable hydrologic information.

**WFO Flagstaff, AZ** — For providing unique, proactive, and superior Decision Support Services during the extreme winter storms across northern Arizona in January 2010.

## Western Region LIFT Program



Please join me in congratulating the following individuals who have been selected for LIFT VI. The Western Region's sixth Leadership and Innovation for Tomorrow (LIFT) class will be held in Boise, ID, April 17-22, 2011.

WFO Elko - Jeff Rood

WFO Great Falls - Bob Hoenisch

WFO Medford - Sven Nelaimischkies

WFO Monterey - Mark Strobin

WFO Phoenix - Leslie Wanek

WFO Sacramento - Brooke Bingaman

WFO Sacramento - Cindy Matthews

WFO Great Falls - Ben Schott

WFO Hanford - Cindy Bean

WFO Missoula - Daniel Zumpf

WFO Oxnard - Curt Kaplan

WFO Portland - Clinton Rockey

WFO Spokane - Anthony Cavallucci

WFO Boise - Travis Mayer

## Dual-Pol Update

The Dual-Pol upgrade implementation schedule has slipped approximately 5 months. A few of the issues are:

- Improve the calibration procedures and equipment access by the ETs
- Continue testing on reflectivity differential calibration and stability
- Complete system reliability tests
- Clean up remaining system documentation issues

A few of the initial steps taken are:

- Dual-Pol has been installed at the Vance AFB to conduct the system reliability tests. The Radar Operations Center (ROC) is hoping that the lessons learned from the Vance installation will allow them more insight into the implementation process for the Beta sites.

- Phoenix is WR's first site and part of the first five national Beta sites. A new schedule for the Beta sites is being coordinated.

## Featured Decision Support

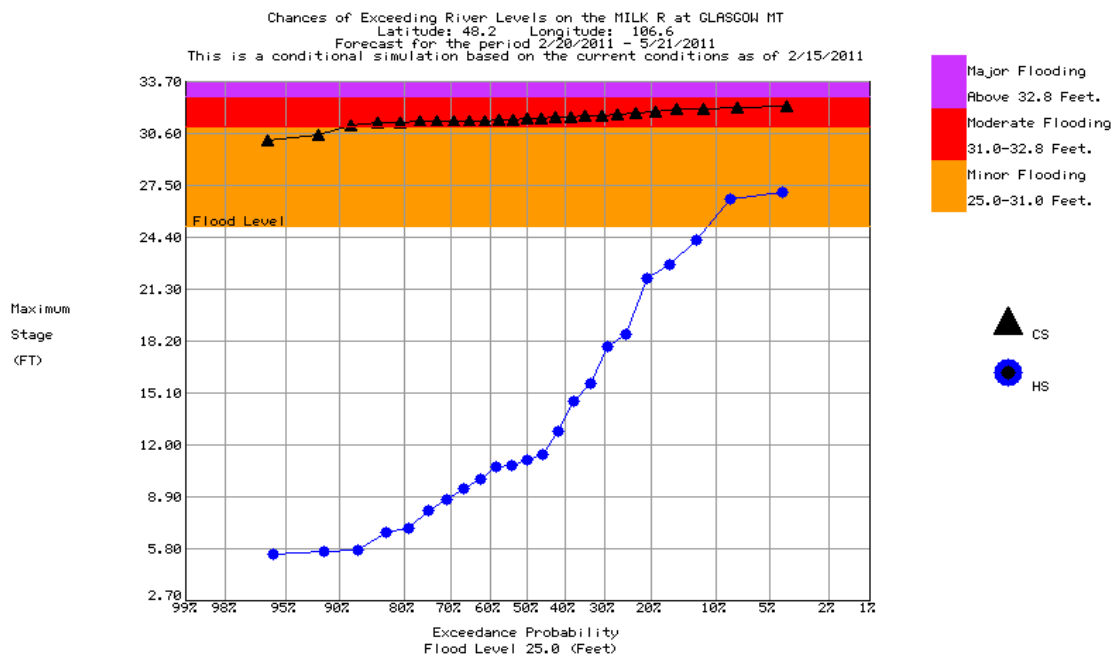
Northeast Montana has experienced record snowfall this winter. This much above normal snowpack will lead to an increased risk of major flooding on the Milk River this spring. To inform their community partners of this threat WFO Glasgow has done extensive outreach over the past few months.

On February 1, WFO Glasgow hosted a Flood Task Force Meeting in the office and via conference call. In all, 38 people attended this meeting with representatives from: Missouri Basin RFC, WRH, NOHRSC, Valley County, The City of Glasgow, Montana DES, Montana DOT, USACE, USGS and the Glasgow Courier newspaper. On February 22, WFO Glasgow provided an update to the previous forecast for all interested partners. Meetings will recur every one to two weeks through the season.



L to R: Ben Moyer, MIC WFO Glasgow, Bruce Peterson, Valley County Commission Chair, Tanja Fransen, WCM WFO Glasgow, and Rick Seiler, Valley County DES.

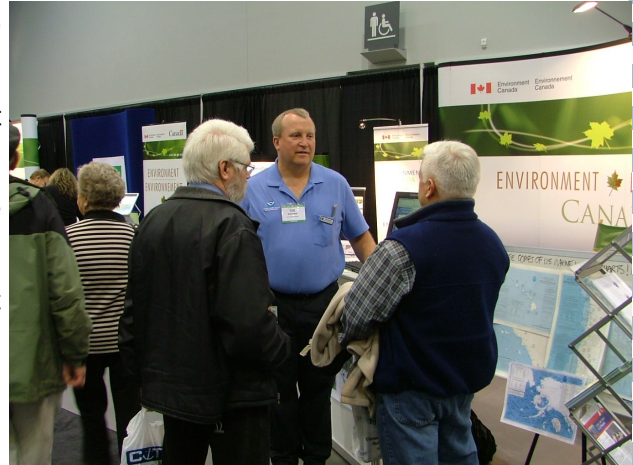
Other in-person public meetings were held in the communities that may be affected; Malta, Glasgow, and Nashua. At the meeting held in Glasgow there were nearly 100 people in the Valley County Courthouse. The discussion focused on the spring flood potential, how it compares to past events and the National Flood Insurance Program (NFIP). The Valley County Commissioners and the Mayors of Glasgow and Nashua were at the meeting to answer questions (along with public works and the floodplain manager). The NFIP information was presented by a representative of FEMA Region VIII.



## 2011 Vancouver Boat Show

WFO Seattle WCM Ted Buehner was invited to participate in Environment Canada's (EC) Meteorological Services booth at the 2011 Vancouver Boat Show held February 9-13 at the Vancouver Convention Centre. Ted was there the final three days to help address the frequent questions EC gets about NWS marine products and services. In exchange, David Jones of EC's Pacific Storm Prediction Centre (PSPC) participated in the WFO's Seattle Boat Show booth in late January. The WFO and PSPC both have mariners that use the shared marine waters along the international boundary.

Ted had a number of NWS resources on hand including an Ocean Prediction Center flier, MSC charts, NWR brochures, NCBC brochures, NWS web site cards, Pacific Hurricane tracking charts tsunami and lightning information, and more. Supplies for several materials were exhausted such as the OPC flier. The MSC charts, international marine fax charts web site cards, NDBC brochures and Puget Sound and Neah Bay NWR station brochures were quite popular.



Ted Buehner, WCM at WFO Seattle, speaks with attendees of the 2011 Vancouver Boat Show.

The EC booth was huge, measuring 40 feet by 10 feet. It had two PC kiosks at either end with large flat screens for web site use. NWS web sites were among those demonstrated. There was a minimum of three staff in the booth serving the 35,000 that attended the event and sometimes as many as five staff in the busy booth.

The Client Services Manager for the EC Pacific and Yukon Region offered the following to MIC Brad Colman -

*"The information and expertise of the National Weather Service that Ted brought to the Meteorological Service of Canada booth was well received by attendees. Several people who had visited our booth earlier in the week returned again to catch one of Ted's shifts. Every year the Environment Canada staff hears questions about US services and in particular the off shore forecasts, weather faxes. Having Ted bring both printed information and give his time to answer questions was of great value. We also appreciated the information on US Weather radio, lightning for boaters, tsunami alerts across the globe. In the future, we hope that further exchanges of staff will benefit both our clients and our own staff."*



## 2011 AMS WeatherFest

The 2011 AMS Meeting was held in Seattle at the Washington State Convention and Trade Center from January 23-27. Over 3300 meteorologists and climatologists from around the world attended.

The AMS's public event WeatherFest was held on Sunday, January 23rd. WeatherFest is an interactive science and weather fair designed to instill a love for math and science in children of all ages and to spark a young person's interest in this area so they may consider a career in these and other science and engineering fields.

Interest in this year's WeatherFest event was strong thanks in part to the efforts of the local AMS WeatherFest committee co-chaired by KING-TV Chief Meteorologist Jeff Renner and WFO Seattle's WCM Ted Buehner. The close to six dozen exhibitor booths were filled in November, the earliest ever for this event. Outreach efforts including a first-ever WeatherFest media promotion tour with the AMS President Peggy LeMone and Ted on the previous Friday helped draw a full house of 4000 people to attend.

Exhibitors were wide ranging including a number of local schools (one highlighting their rocket program), CoCoRaHS, the NW Weather and Avalanche Center with their popular avalanche simulator, AMS, NWS and



*AMS President Peggy LeMone, NWS Deputy Director Laura Furgione and the WNBA Seattle Storm's mascot Doppler cut the ribbon to open the 2011 AMS WeatherFest.*

NOAA, a number of TV and cable weather stations, military, green energy, Boys and Girls Scouts, marine, astronomy, USGS, universities and many more. Each exhibitor had hands on activities for kids of all ages to enjoy.

The AMS Annual Meeting next year will be in New Orleans. WeatherFest will help kick off the 2012 Meeting.

## NWS Sacramento Receives Girl Scout Council Award



The local Girl Scout council selected WFO Sacramento forecast to receive their annual community honoree recognition due to the many years that WFO Sacramento has conducted the Weather Watch badge program and other support to the girls and leaders that they serve. The additional support has included providing training for their leaders and staffing a booth at Girl Scout Day events through the years. The biggest involvement, though, has been the sixteen Weather Watch badge programs conducted during the past six years. This has totaled more than a thousand girl scouts (and additionally their parents) receiving an introduction to meteorology, hydrology, general science, and weather safety and emergency preparedness. The program continues to generate requests of two to three times the number of openings in each of the sessions, which seems to be a good sign that the program is valued by the girls and their leaders.

The Weather Watch badge program requires the help of a lot of people to conduct. For most sessions, WFO Sacramento staffers have been assisted by staffers from the CNRFC as well as many of our student volunteers, mentees, and family members. Many WFO Sacramento staff members have covered operational shifts to allow other staff members the chance to participate directly. Others have helped to develop or refine segments of the program. In all, this program has been an enjoyable way for all staff members to interact with the public and with the many components of the NWS family in Sacramento.

# What's New?

## Atmospheric Rivers (AR) Study Using Unmanned Aircraft

NOAA scientists will use unmanned aircraft to study “rivers in the sky” during the Winter Storms and Pacific Atmospheric Rivers, or WISPAR, field campaign slated to begin Feb. 11. The focus of the research is to improve our understanding of how atmospheric rivers form and behave, and to evaluate the operational use of unmanned aircraft for investigating these phenomena.

Atmospheric rivers, or ARs, are narrow regions in the atmosphere that transport large amounts of water vapor across the Pacific and other regions. In one day, an average AR transports an amount of water vapor equivalent to a foot of liquid water covering 10 million acres — an area roughly the size of Maryland. This is about seven times the average daily flow of water from the Mississippi River into the Gulf of Mexico. Only a portion of the water vapor transported by an AR is transformed into rain or snow; for example, about 20-40 percent in one AR crossing northern California makes it to the surface.

While ARs are responsible for great quantities of rain that can produce flooding, they also contribute to beneficial increases in snowpack. A series of atmospheric rivers fueled the strong winter storms that battered the U.S. West Coast from western Washington to southern California from December 10-22, 2010, producing 11 to 25 inches of rain in certain areas. The ARs also contributed to the snowpack in the Sierras, which received 75 percent of its annual snow by December 22, the first full day of winter.

NASA's Global Hawk, which is operated by NASA's Dryden Flight Research Center in southern California, is equipped with sensors including an advanced water vapor sensor — the high-altitude monolithic microwave integrated circuit sounding radiometer, or HAMSr — created by NASA's Jet Propulsion Laboratory in Pasadena, Calif., and a new dropsonde funded by NOAA and developed by the National Center for Atmospheric Research in Boulder, Colo. The dropsondes will be launched from the Global Hawk and take temperature, wind and other readings as they descend through an AR. Unmanned aircraft are being used in a variety of scientific studies because they are able to fly long distances, stay aloft for more than 24 hours and can travel at high and low altitudes that could be dangerous for humans.

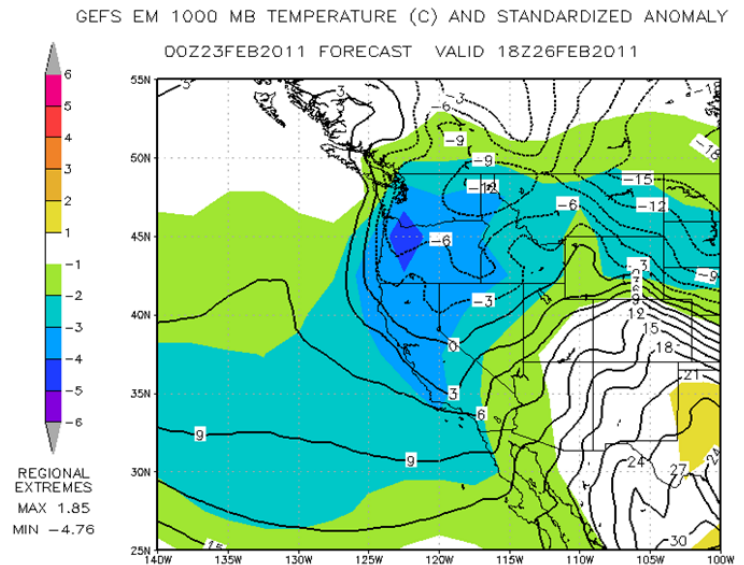
Global Hawk Image Gallery



# What's New?

## Model Anomalies To Help Focus DSS Messaging

The standardized anomalies page created by Randy Graham, SOO SLC, continues to be useful during active weather for assessing the possible impacts at long leads times. This application gave insight into the expected impacts of the major system affecting Western Region late last week and over the weekend. The application indicated at least five days in advance that there would be widespread temperature anomalies of at least three standard deviations below normal near the surface, while moisture anomalies were only slightly above normal. The most noteworthy aspect of the system with 177 low temperature records set or tied over the weekend and the unusually low snow levels in locations like southern California and Arizona.



Forecasters are encouraged to monitor the situation awareness table located at <http://www.wrh.noaa.gov/slc/projects/anomaly/frames.html> to anticipate upcoming impacts in their forecast area.

Western US Table   February 28th 2011   06z run																																
	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
Height	-2.5	-2.6	-2.6	2.5	2.6	2.5	2.6	-2.8	-3.1	-3.3	-3.1	-2.9	-2.4	2.3	2.1	2.0	-1.9	-2.2	-2.0	2.2	2.1	2.1	2.1	2.2	2.2	2.1	1.9	-1.8	-1.8	-2.0	-2.4	
Temp	-3.9	-4.8	-4.7	-4.1	-4.6	-4.6	-4.6	-4.2	-4.0	-3.9	-3.7	-3.9	-3.8	-3.5	-3.0	-3.4	-2.8	-2.9	-3.0	-3.4	-3.0	-3.2	-3.3	-3.4	-3.4	-3.6	-3.8	-4.5	-4.3	-4.6	-4.3	
U-Wind	3.6	4.2	4.0	4.0	3.5	3.4	3.1	-3.2	3.2	-3.5	3.2	2.9	2.7	3.0	2.4	2.7	2.1	3.6	2.5	-3.4	-3.3	-3.3	2.8	-2.7	2.7	3.2	2.5	2.7	3.0	3.2	2.7	
V-Wind	3.9	4.4	4.0	-3.6	3.2	3.5	3.3	3.7	4.1	4.0	4.0	2.8	3.1	-3.2	-2.7	-2.8	-3.1	-3.6	-3.3	-3.2	-2.8	-2.9	-2.6	-2.3	-2.4	-2.2	-2.9	-2.1	-2.5	2.1	-2.2	
SHum	-1.8	-1.8	-1.7	-1.7	-2.1	-2.1	-2.1	1.8	-2.1	2.1	-2.6	2.2	-2.5	-2.4	-2.4	-2.0	-2.2	-1.9	-2.1	-2.5	2.9	3.3	-2.9	3.8	3.6	4.0	3.6	2.9	-2.8	-2.6	-2.7	
MSLP	-2.4	-2.6	-2.4	2.2	-2.2	-2.3	-2.6	-2.8	-3.0	-3.2	-3.1	-2.4	-1.6	1.3	1.3	1.4	1.7	2.0	2.2	2.5	2.4	2.3	2.2	2.0	1.9	1.9	1.8	1.8	-2.0	-2.2		
PWAT	-1.9	-1.9	2.2	2.5	2.5	2.7	2.8	2.8	3.0	2.9	3.0	3.1	3.1	3.5	2.3	1.8	1.6	-1.4	-1.5	1.7	2.0	2.1	2.1	2.1	2.3	2.6	2.7	2.5	2.2	1.9	-1.7	
Table Explanation   Anomaly Page   Northwest   Southwest   Alaska   North Central   Northeast   South Central   Southeast   CONUS																																

### Anomaly Situational Awareness Display

The above table has been designed to allow forecasters to quickly identify if significant anomalies are forecast in the GEFS mean, and if so, for which variables and time frames. The table is color coded as follows:

Anomaly (SD)	Color
+5.00 or greater	Red
+4.00 to +4.99	Orange
+3.00 to +3.99	Yellow
+2.00 to +2.99	Light Green
Between +1.99 and -1.99	White
-2.00 to -2.99	Light Green
-3.00 to -3.99	Yellow
-4.00 to -4.99	Orange
-5.00 or lower	Red

## New Diversity Curriculum on the CLC Website

On January 12<sup>th</sup>, an optional Diversity Training Curriculum was released on the Commerce Learning Center website for all employees who would like to learn more about the topic of diversity. A team chartered by the National Weather Service Diversity Council, working in cooperation with the NWSEO, developed a list of thirteen recommended courses. These courses were selected from over 80 top courses available on the Commerce Learning Center site. The final course selections were categorized by skill levels and subject categories.

Course	Length (hr)	Level	Category
Diversity on the Job: The Importance of Diversity and the Changing Workforce	1.0	Beginner	Leadership
Energizing and Empowering Employees	2.5	Beginner	Leadership
Building Effective Intergender Relationships	2.5	Beginner	Diversity, Communication
The Art of Global Communication	3.5	Beginner	Communication
What is Emotional Intelligence	2.5	Beginner	Emotional Intelligence
Building Relationships to Get Results	2.5	Intermediate	Leadership
Getting Past Clashes: Valuing Team Diversity	2.5	Intermediate	Diversity
Mentoring Effectively	2.0	Intermediate	Leadership
The Leader As a Model	3.0	Intermediate	Leadership
Leading Generations X and Next	3.5	Advanced	Diversity
Leading Silent Generation and Baby Boom Workers	3.0	Advanced	Diversity
Designing a Diversity Initiative	3.0	Advanced	Diversity
The Emotionally Intelligent Leader	2.5	Advanced	Emotional Intelligence

The team that finalized these courses consisted of a diverse set of employees from across NOAA and the NWS including two employees from Western Region. Guidance on the task was provided by the NWS Office of Equal Opportunity and Diversity Management, NWS Diversity Council, and the NWS Diversity Council NWSEO Representative and OPL in WFO Billings, Carolyn Willis.



## COMET – Call for Collaborative Project Proposals

To prepare for new products that will be available starting in 2015 when the first GOES-R satellite is launched, the GOES-R Satellite Proving Ground has joined with the National Weather Service (NWS) forecast and warning community to conduct pre-operational demonstrations of selected capabilities.

In 2011, the NOAA/NESDIS GOES-R Program will fund a new Outreach Program activity to provide support for 4 Cooperative Projects and 8 Partners Projects. The purpose of this Request for Proposals (RFP) is to broaden the Proving Ground's activities to encourage university researchers with satellite expertise to partner with current Proving Ground participants and/or new NWS offices in testing, validating, or finding innovative uses for GOES-R products. These NWS offices can include Weather Forecast Offices, River Forecast Centers Regional Headquarters, or National Specialized Centers, and we encourage the participation of offices not currently involved in the Proving Ground.

Funding will be available for:

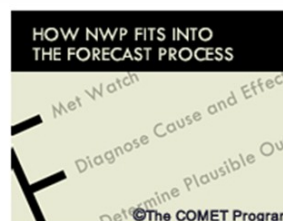
**Cooperative Projects:** Four two-year Collaborative Projects with an annual funding limit of ~\$45-50,000 for each year will be awarded. Proposals must be collaborative efforts with NWS offices that will advance the goals of the Proving Ground in innovative ways. Projects will be chosen in a competitive review process. Draft proposals are due to NWS SSD Chiefs or the NCEP Principal Scientist by March 2011, and final proposals must be submitted to the COMET Outreach Program by April 2011.

**Partners Projects:** These projects are smaller, more targeted efforts that will last one year and have an average funding level of ~\$15,000 per project. Although more focused efforts than the Cooperative Projects (e.g., case studies or pilot studies rather than broader research), Partners Projects must also be collaborative efforts with NWS offices. These proposals will be accepted beginning now, reviewed as they are received, and will be funded based on the selection criteria until the 8 projects have been awarded.

For more information, see the full RFP at [http://dev.comet.ucar.edu/outreach/goesr\\_rfp.html](http://dev.comet.ucar.edu/outreach/goesr_rfp.html) or contact the Outreach Program, Dr. Vickie Johnson at [vjohnson@comet.ucar.edu](mailto:vjohnson@comet.ucar.edu) (phone: 303-497-8361)

## New Training:

COMET has released some new modules



- [Flash Flood Processes: International Edition](#)
- [Preparing to Evaluate NWP Models](#)
- [Snowmelt Processes: International Edition](#)
- [Radar Signatures for Severe Convective Weather](#)
- [Forecasting Dust Storms - Version 2](#)

## New Employees in Western Region's Scientific Services Division

**Chad Kahler** has been selected as a Service Hydrologist in the Scientific Services Division. Chad was serving as a Service Hydrologist in WFO Tucson. Chad is replacing Dave Streubel who was promoted to a position in HCSD.

**Chris Smallcomb** has been selected as Deputy Division Chief of SSD to replace Mark Mollner who retired with 38 years of NWS service last December. Chris is currently working in the NOAA Program Coordination Office as the NWS liaison to Dr Lubchencko. Prior to this assignment, Chris was the SOO at WFO Reno.

## New Systems Operations Division Chief

Sean Wink has been selected as the new chief of the Systems Operations Division at the National Weather Service's Western Region Headquarters in Salt Lake City, Utah. Sean is a career Weather Service employee with 19 years experience. Sean began his career with the National Weather Service as a student trainee in 1992 at the weather service office in Cincinnati, Ohio. He worked as an ASOS and Nexrad technician at the weather forecast offices in Wilmington, Ohio and Monterey, Calif. He was later promoted to the position of Electronics Systems Analyst for the Monterey weather forecast office in 2001. In Nov. of 2003, he was selected as the Electronics & Facilities Branch chief in the Systems Operations Division, Western Region Headquarters and was again promoted to the deputy chief of the Systems Operations Division in 2008. Sean earned a Bachelor of Science from the University of Cincinnati in Information Engineering Technology and holds several professional certifications, including the Certified Information Systems Security Professional (CISSP).



## New Budget Analyst in AMD

Tyler Nelson has been selected as the new Budget Analyst in the Administrative Management Division. Tyler comes to us from the private sector, working as the Controller and Human Resource Manager for Yusef Manufacturing Laboratories in Clearfield, Utah. He has a Bachelor of Science degree in accounting from Weber State University in Ogden, Utah.



## Length of Service Awards



Myrick, David	WFO Reno, NV	Science Operations Officer	5 Years
Rogowski, Stephen	WFO Salt Lake City, UT	Meteorologist, Lead Forecaster	10 Years
Jones, Darone	WRH/MSD Salt Lake City, UT	Meteorologist	15 Years
Decker, Coleen	WFO Boise, ID	Meteorologist, General Forecaster	15 Years
Cox, Claudia	WRH/RDO Salt Lake City, UT	Chief of Operations	20 Years
Le Blanc, James	WFO Flagstaff, AZ	Meteorologist, General Forecaster	20 Years
Durfee, Kevin	WFO Hanford, CA	Meteorologist, General Forecaster	20 Years
Nelson-Offutt, Valerie	CBRFC Salt Lake City, UT	Administrative Support Assistant	20 Years
Norwood, Alan	WFO Seattle, WA	Information Technology Officer	30 Years
Lamoni, Roger	WRH/MSD Salt Lake City, UT	Fire Weather Meteorologist	30 Years
Sipple, Stephen	WFO Phoenix, AZ	Meteorologist, General Forecaster	40 Years

## New Hires in Western Region for February

Kahler, Chad	WRH/SSD Salt Lake City, UT	Service Hydrologist
Meier, Jamie	CNRFC Sacramento, CA	HAS Forecaster
Brost, John	WFO Tucson, AZ	SOO
Carney, Christopher	WFO Tucson, AZ	ESA
Nelson, Tyler	WRH/AMD Salt Lake City, UT	Budget Analyst
Dodd, Alex	WFO Eureka, CA	Meteorologist, General Forecaster
Hinsberger, John	WFO Pocatello, ID	Meteorologist, General Forecaster
Hartley, Treena	WFO Portland, OR	Meteorologist, Lead Forecaster
Smallcomb, Christopher	WRH/SSD Salt Lake City, UT	Deputy Division Chief

Please send newsletter submissions to:  
[matt.ocana@noaa.gov](mailto:matt.ocana@noaa.gov) and [levi.wilmert@noaa.gov](mailto:levi.wilmert@noaa.gov)  
by the **25th** of every month.